Defense Appropriations Requests

The following requests are Idaho-related projects supported and sponsored by Senators Crapo and Risch:

Item Name: 3-D Technology for Advanced Sensor Systems
FY 2010 Request: $3,960,000
Recipient: Boise State University
Location of work: Boise, Idaho
Public Interest: Lower cost, lighter weight, and smaller sensor systems that will expand the current sensor technologies.
Project Description: This project would develop new technology for new three-dimensional (3-D) packaging of electronic systems, particularly sensor systems for portable applications.

Item Name: 5.56mm Aluminum Cartridge Case
FY 2010 Request: $2,000,000
Recipient: ATK (Alliant Techsystems, Inc.)
Location of work: Lewiston, Idaho
Public Interest: Enables the military to train and maintain readiness, while complying with EPA and DOD regulations.
Project Description: Supports a DOD initiative to eliminate heavy metal compounds from priming mixtures by capitalizing on industry technology development efforts to find potential heavy metal free compounds can be applied to military small-caliber ammunition requirements.

Item Name: AB-FIST Gunnery Trainer Upgrades
FY 2010 Request: $15,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard
Project Description: This project would upgrade the Idaho Army National Guard's current Bradley Gunnery Trainers (AB-FIST and COFT XXI systems) to the M2A2ODS configuration.

Item Name: Accelerator-Driven Non-Destructive Testing
FY 2010 Request: $4,000,000
Recipient: Idaho State University
Location of work: Pocatello, Idaho
Public Interest: Improve U.S. Air Force operational readiness by reducing the time and cost associated with aircraft inspections and repairs
Project Description: This project would continue the development of non-destructive testing techniques for aircraft inspections to more quickly identify needed repairs through spectroscopy and x-ray on an "on condition" inspections basis, rather than the current aircraft tear-downs and parts replaced on a "life limited" basis.

Item Name: Advanced Continuous Active Sonar for Unmanned Undersea Vehicles
FY 2010 Request: $4,000,000
Recipient: Acoustic Research Detachment Through Alion Science and Technology
Location of work: Bayview, Idaho
Public Interest: Improves situational security and stealth engagement of Navy vessels, with applications for port security.
Project Description: This project will continue the development of Continuous Active Sonar technology to improve sonar performance for anti-submarine warfare and reductions in system size and weight, and enhance stealth capabilities.

Item Name: A-FIST XXI and COFT XXI Upgrade
FY 2010 Request: $15,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard
Project Description: This project would upgrade the Idaho Army National Guard's current fleet of M1A1 Abrams Gunnery Trainers (A-FIST XXI and COFT XXI) to the M1A1 AIM configuration.

Item Name: Combined Arms Virtual Trainers
FY 2010 Request: $20,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard.
Project Description: This operating system would allow the Idaho Army National Guard soldiers to train jointly on the same virtual battlefield as tank crews, Bradley Fighting Vehicle crews, helicopter crews, convoy crews, and as individual dismounted soldiers.

Item Name: Composite Bottles for Survival Egress Air
FY 2010 Request: $4,000,000
Recipient: Unitech Composites, Inc.
Location of work: Hayden, Idaho
Public Interest: Improves Army Aircrew survivability
Project Description: Reduces the bulk and weight of Army personal compressed air systems used in emergency exiting helicopters through the use of composites in place of metal canisters, to improve air capacity for survivability and meet ballistic threshold requirements.

Item Name: Design of Lightweight Vehicle Structures for Improved Safety and Reliability
FY 2010 Request: $1,113,000
Recipient: University of Idaho
Location of work: Moscow, Idaho
Public Interest: Improves the performance and reliability of U.S. Army personnel-carrier and combat vehicles exposed to different threats in various environments.
Project Description: This project would develop materials, components, and technologies for the new generation of Army transportation and combat vehicles with the goal of reducing the vehicle weight and enhancing resistance to explosions and projectile penetrations, as well as normal service conditions.

Item Name: Disaster Response: Communications and Other Infrastructure Restoration
FY 2010 Request: $5,000,000
Recipient: Idaho National Laboratory
Location of work: Idaho Falls, Idaho
Public Interest: Support critical infrastructure protection solutions for DOD
Project Description: Develops a networked and distributed risk assessment capability for the DOD, with the goal of providing DOD an enhanced capability to simulate, assess, and develop techniques to sustain mission operations when critical infrastructures are threatened by either natural disasters or events such as cyber attacks.

Item Name: DNA-Based Nanotechnology: Manufacturing with Molecular Building Blocks
FY 2010 Request: $3,000,000
Recipient: Boise State University
Location of work: Boise, Idaho
Public Interest: For defense research and application of advanced technology
Project Description: This project will develop DNA-based self-assembly into a novel manufacturing process for the fabrication of nanoscale substrates and devices for defense, semiconductor, and biomedical applications.

Item Name: DNA Safeguard
FY 2010 Request: $1,900,000
Recipient: Boise State University
Location of work: Boise, Idaho
Public Interest: Public assurance that DNA samples collected will be safeguarded against contamination, mislabeling, and misuse.
Project Description: The DNA safeguard marker is a DNA-based label that will be included in sample collection vessels used in DNA collection, and will automatically tag any voluntary or reference DNA sample with a molecular marker that will permanently identify it as such.

Item Name: Domestic Manufacturing of 45nm Electronics
FY 2010 Request: $4,000,000
Recipient: American Semiconductor, Inc.
Location of work: Boise, Idaho
Public Interest: To advance and sustain microelectronics technology for defense and intelligence applications.
Project Description: An initiative to implement a 45nm state-of-the-art wafer fabrication capability to meet current and future system requirements for fabrication of specialized integrated circuits in a broadly available foundry capacity that can serve all DOD, DOE and NASA agencies requiring custom Integrated Circuits.

Item Name: Electric Grid Reliability/Assurance
FY 2010 Request: $3,000,000
Recipient: Idaho National Laboratory
Location of work: Idaho Falls, Idaho
Public Interest: Enhanced capabilities for critical mission assurance in the event of an EMP attack.
Project Description: This project would develop the capability to perform research and testing of the effects of Electromagnetic Pulse attacks on the electric power grid and associated control systems, critical communications systems, and other defense critical infrastructure.

Item Name: Electromagnetic Signature Assessment System Using Multiple Autonomous Undersea Vehicles, Phase III
FY 2010 Request: $2,000,000
Recipient: University of Idaho
Address of work: Moscow, Idaho
Public Interest: Protects forward-deployed ships or submarines from potential threats
Background / Justification: Integrates easily deployable electromagnetic and acoustic measurement systems into small autonomous underwater vehicles to assess the signature of a forward-deployed ship or submarine, and assuring its stealth condition relative to potential threats, especially torpedoes and mines.

Item Name: Enhanced Survivability of Military Personnel and Vehicles Through Development of Advanced Composite Materials
FY 2010 Request: $1,500,000
Recipient: Idaho National Laboratory
Location of work: Idaho Falls, ID
Public Interest: Supports the military's mission for the rapid-development and deployment of protective systems from explosive devices for military personnel, vehicles, and equipment.
Project Description: Research will focus on developing improvements to existing computer models and materials to enhance future mitigation solutions by predicting the effects of explosives devices and the performance of protective solutions. This project will support the research, development, and testing of light-weight armor solutions to evaluate damage and survivability from explosive devices and explosively formed projectiles.

Item Name: Flextrain Exportable Combat Training Capability (XCTC)
FY 2010 Request: $7,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard
Project Description: This project would provide the Idaho Army National Guard with the remaining equipment requirement for a multi-mission instrumentation capability, (XCTC), that provides units and commanders with real-time situational awareness of the locations and actions of soldiers and vehicles conducting complex counter-insurgency training operations.

Item Name: Gray Water Treatment Technology
FY 2010 Request: $1,200,000
Recipient: University of Idaho
Location of work: Moscow, Idaho
Public Interest: The Navy requires wastewater treatment systems that can efficiently process waster onboard U.S. Navy ships in order to reduce costs, comply with environmental requirements, and afford greater operational flexibility.
Project Description: This project would develop an energy-efficient shipboard wastewater treatment system using sound waves and catalytic oxidation to destroy contaminants.

Item Name: Hybrid Energy Systems Design and Testing
FY 2010 Request: $8,000,000
Recipient: Idaho National Laboratory
Location of work: Idaho Falls, Idaho
Public Interest: Surety and security of electrical, transportation, and process energy
Project Description: This project would provide detailed engineering designs, hybrid systems testing capabilities to validate designs, and the ability to computationally and experimentally test a variety of advanced integrated energy concepts.

Item Name: Hybrid Power Generating System
FY 2010 Request: $8,000,000
Recipient: M2E Power, Inc.
Location of work: Boise, Idaho
Public Interest: Improved power sources for mission extension and reduced reliance on disposable batteries for dismounted soldiers
Project Description: This project will continue the development of technology using compressed magnetic fields that can generate power; this technology will enable lightweight, compact power sources, and highly-power dense components that will significantly reduce the cost and logistics burden of current power supply.

Item Name: Improved Treatment for TBI and PTSD Evaluation Through Innovative Behavior Imaging and Video Capture
FY 2010 Request: $1,118,000
Recipient: Caring Technologies, Inc
Location of work: Boise, Idaho
Public Interest: Improved mental health treatment for military personnel
Project Description: This project would develop, demonstrate, and implement for field trial assessment, a cost-effective and non-complex method to assist medical experts and technicians in the diagnosis and treatment of behaviors disorders through advanced telehealth technology.

Item Name: Improving Military Families' Access to Health Care for Behavioral Disorders via Telehealth
FY 2010 Request: $911,000
Recipient: Caring Technologies, Inc.
Location of work: Boise, Idaho
Public Interest: To improve military healthcare options for military dependents
Project Description: This project would provide a telehealth solution for military dependents with autism on military bases to communicate behavior and symptoms from their natural environment to remote health care specialists.

Item Name: Innovative Nanotech Applications For Defense and Health
FY 2010 Request: $1,500,000
Recipient: Boise State University
Location of work: Boise, Idaho
Public Interest: Improved treatment of bacterial infection for military personnel
Project Description: This project proposes to understand the interaction of nanomaterials with biological systems and develop metal oxide nanoparticle-based approaches to solve cross-cutting problems in the treatment of bacterial infections and cancer, biowarfare countermeasures, nano-bio sensors, and antibacterial coatings on personnel protective equipment, clothing, and medical devices.

Item Name: Integrated Passive Electronic Components
FY 2010 Request: $1,791,934
Recipient: University of Idaho
Location of work: Moscow, Idaho
Public Interest: Improves spacecraft information processing to ensure quality and accuracy of intelligence, and strategic and tactical operational information.
Project Description: This project would increase the operational and intelligence-gathering capability of spacecraft by dramatically reducing the electrical power requirements for sensing and data processing, enhancing on-orbit reconfiguration to adapt to changing mission requirements and extend the useful life of the spacecraft, and enabling new modes of sensing, communication, and computing technologies.

Item Name: Laser Studied and Enhanced Reactive Materials: Self-Decontaminating Polymers for Chemical-Biological Defense
FY 2010 Request: $2,200,000
Recipient: Boise Technology, Inc.
Location of work: Boise, Idaho
Public Interest: Chemical and biological defense protection
Project Description: Supports a DOD requirement to improve the chemical/biological protection capability of the present chemical-biological suit by studying the molecular scale properties of the materials interactions with threat agents and the environment to develop new self-deactivating or "self-decontaminating" materials.

Item Name: Material, Design, and Fabrication Solutions for Advanced SEAL Delivery System External Structural Components
FY 2010 Request: $3,000,000
Recipient: Premier Technology, Inc.
Location of work: Blackfoot, Idaho
Public Interest: Improves clandestine engagement
Project Description: This project would assist the U.S. Navy in bringing the Advanced SEAL Delivery System (ASDS) to its fullest operational capability by providing material, design, and fabrication solutions for ASDS external structural components allowing those components to withstand severe hydrodynamic, hydrostatic, and shock loading.

Item Name: Medical Modeling and Simulation Through Synthetic Digital Genes
FY 2010 Request: $2,600,000
Recipient: Crowley Davis Research, Inc.
Location of work: Eagle, Idaho
Public Interest: Increases the military's medical training and combat casualty care capabilities.
Project Description: This multiyear project would develop enabling technologies for advanced tissue modeling, with a particular emphasis on the human skin as well as related toxicological platform development and stem cell research.

Item Name: Mine Resistant Ambush Protected Vehicle Virtual Trainers
FY 2010 Request: $25,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard
Project Description: The MRAP Vehicle Virtual Trainers allow soldiers to train to drive these vehicles on virtual terrain simulating areas of operations, with the intent of preparing soldiers to operate MRAP vehicles prior to deployment.

Item Name: Neurobehavioral Surveillance, Diagnostics and Therapeutic Intervention of Brain Injured
FY 2010 Request: $1,932,466
Recipient: Saint Alphonsus Regional Medical Center
Location of work: Boise, Idaho
Public Interest: Improve accuracy and minimize delay of diagnosis of mental health and brain injuries for military personnel.
Project Description: This research project would identify metabolic patterns of military personnel and veterans who endure Post Traumatic Stress Disorder and combat brain-injuries through diagnostic evaluations.

Item Name: Next Generation Decontaminating Soaps for the DOD
FY 2010 Request: $1,600,000
Recipient: Boise Technology, Inc.
Location of work: Boise, Idaho
Public Interest: Chemical and biological protection for the military and civilian populations
Project Description: This project would improve decontaminating surfactant systems by researching the molecular-level details of surfactant macromolecular structures as they interact with a surface and contaminant.

Item Name: Pediatric Cancer Research and Clinical Trials
FY 2010 Request: $20,000,000
Recipient: Mountain States Tumor Institutes
Location of work: National
Public Interest: Enhance health care options for military dependents.
Project Description: This project would support ongoing pediatric cancer clinical trials, and create new clinical trials, benefiting children of military families and civilian DOD employees with cancer.

Item Name: Photoacoustic Chemical Sensor
FY 2010 Request: $1,750,000
Recipient: Manning Applied Technologies, Inc.
Location of work: Troy, Idaho
Public Interest: Improved detection of airborne chemical agents and toxic industrial chemicals
Project Description: This project would continue research and development a portable and handheld infrared chemical agent sensors for the detection of airborne chemical agents and toxic industrial chemicals well below permissible exposure limits in the parts-per-billion range.
Item Name: Read Out Integrated Circuit Manufacturing Improvement
FY 2010 Request: $4,000,000
Recipient: ON Semiconductor
Address of work: Pocatello, Idaho
Public Interest: Improves survivability and availability of supply technology critical to defense and intelligence applications
Project Description: This project would improve manufacturing capabilities and cryogenic and radiation performance of Readout integrated circuits, which are the foundation of thermal imaging systems.

Item Name: Reconfigurable Electronics and Non-Volatile Memory Research
FY 2010 Request: $2,000,000
Recipient: Boise State University
Address of work: Boise, Idaho
Public Interest: Improves the reliability and longevity of electronic device technologies.
Project Description: Study on materials systems and electronic devices for reconfigurable electronics and phase-change memory applications to develop new memory devices capable of maintaining information in the absence of electrical power supplies or in the presence of radiation sources.

Item Name: Security Solutions from Life in Extreme Environments Center
FY 2010 Request: $2,000,000
Recipient: Idaho State University
Location of work: Pocatello, Idaho
Public Interest: Development of improved neutralization strategies against biothreats.
Project Description: A study focusing on the molecular mechanisms that enable extremely radiation-resistant extremophiles to survive radiation levels orders of magnitude greater than what humans can withstand, with the goal of decreasing radiation resistance of biological weapons and increase the effectiveness of radiation sterilization applications.

Item Name: Telemedicine Integrated Warrior Recovery and Re-Entry
FY 2010 Request: $1,600,000
Recipient: Business Psychology Associates
Location of work: Boise, Idaho
Public Interest: Improved mental health treatment for military personnel
Project Description: This project would assist the Army in developing new methods of treatment delivery, and bridge the gap between the case management of medical and non-medical care for PTSD and TBI treatment.

Item Name: Testing and Characterization of Radio Frequency Patterns for Efficient and Assured Wireless Applications
FY 2010 Request: $2,000,000
Recipient: Idaho National Laboratory
Location of work: Idaho Falls, Idaho
Public Interest: Improves communications systems for information assurance, interoperability of emergency communications, and extending communication bandwidth.
Project Description: Research on emerging wireless communications systems to characterize unique phenomena associated with the propagation of these systems' radio frequency waves and evaluates prototype solutions exploiting these phenomena, and used to provide more effective use of available communications technologies.

Item Name: TGT, TFT, and TMT Tabletop Trainers
FY 2010 Request: $20,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard
Project Description: The Tabletop Trainer Program would provide on-site convoy and crew gunnery training for Idaho Army National Guard soldiers, and can be deployed with soldiers to major training events and combat operations overseas.

Item Name: Time Critical Targeting Testbed Initiative (Lima Charlie)
FY 2010 Request: $2,560,000
Recipient: Sierra Nevada Corporation
Location of work: Idaho Falls, Idaho
Public Interest: Prepares and trains war fighters for the environments encountered in the Global War on Terror
Project Description: Expands communication systems designed to simulate real world terrorist networks to test and evaluate tactics, techniques, and procedures; and provides joint training for all facets of the intelligence, surveillance, and the reconnaissance chain.

Item Name: USAF Joint Threat Emitter (JTE) Production Accelerator
FY 2010 Request: $20,000,000
Recipient: Mountain Home Air Force Base
Location of work: Mountain Home, Idaho
Public Interest: Accelerate the current fielding plan of JTEs to reduce costs and replace aging assets.
Project Description: This project would produce and deploy new JTE systems to Mountain Home AFB to provide the most realistic training available for combat pilots prior to deployment.

Item Name: Virtual Convoy Operations Trainers
FY 2010 Request: $25,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard
Project Description: This project would purchase Virtual Convoy Operations Trainers for the Idaho Army National Guard to conduct training for convoy operations prior to deployment.

Item Name: Virtual Door Gunner Trainer
FY 2010 Request: $25,000,000
Recipient: Idaho Army National Guard
Location of work: Boise, Idaho
Public Interest: Supports operational readiness by providing the necessary training for members of the Army National Guard.
Project Description: The Virtual Door Gunner Trainer would provide helicopter crew chiefs with a full training capability that allows door gunners to practice engagements from an airborne and moving helicopter.

Item Name: Wind Erosion Simulation Modelings
FY 2010 Request: $1,500,000
Recipient: Idaho State University
Location of work: Pocatello, Idaho
Public Interest: Improves prediction and monitoring of wind-driven soil transport of dust storms
Project Description: This project will provide the U.S. Army more efficient surveillance and prediction of when and where soil transport occurs through improved detection and representation of landscape characteristics that lead to natural and manmade dust and sand storms through the development of a wind erosion simulation model for heterogeneous landscapes.